

# Claims

- [c1] 1. A light emitting diode array illuminant, comprising:  
a carrier, wherein the carrier comprises a front surface and a back surface, and a plurality set of contacts are disposed on the front surface and the back surface of the carrier; and  
a plurality of light emitting diodes, disposed on the carrier, wherein the light emitting diodes are electrically connected to the sets of contacts, respectively, and the illuminant provided by the light emitting diodes emits a light from a side of the carrier.
- [c2] 2. The light emitting diode array illuminant of claim 1, wherein the carrier comprises a Printed Circuit Board (PCB).
- [c3] 3. The light emitting diode array illuminant of claim 1, wherein the carrier comprises a flexible printed circuit (FPC) plate.
- [c4] 4. The light emitting diode array illuminant of claim 3, wherein the FPC plate is either a single layer FPC plate or a multi-layer FPC plate.

- [c5] 5. The light emitting diode array illuminant of claim 1, wherein each of the light emitting diodes is a surface adhesion type light emitting diode element, and each of the light emitting diodes comprises a set of electrodes, and the light emitting diodes are electrically connected to the sets of contacts via the set of electrodes, respectively.
- [c6] 6. The light emitting diode array illuminant of claim 1, wherein the light emitting diodes are symmetrically disposed with each other or interleaved disposed.
- [c7] 7. A light emitting diode array illuminant, comprising:  
a folded FPC plate, comprising a first join area, a second join area, and a bending area, which is connected to the first join area and the second join area, wherein the first join area comprises a plurality set of first contacts, and the second join area comprises a plurality set of second contacts; and  
a plurality of light emitting diodes, disposed on the first join area and the second join area, wherein the light emitting diodes are electrically connected to the sets of first contacts and the sets of second contacts, and the illuminant provided by the light emitting diodes emits a light from a side of the folded FPC plate.
- [c8] 8. The light emitting diode array illuminant of claim 7, wherein each of the light emitting diodes is a surface ad-

hesion type light emitting diode element, and each of the light emitting diodes comprises a set of electrodes, and the light emitting diodes are electrically connected to the sets of first contacts and the sets of second contacts via the set of electrodes, respectively.

[c9] 9. The light emitting diode array illuminant of claim 7, wherein the light emitting diodes electrically connected to the sets of first contacts and the light emitting diodes electrically connected to the sets of second contacts are symmetrically disposed with each other or interleaved disposed.

[c10] 10. A backlight module, comprising:  
a light guide panel, comprising a light incident surface, a light emitting surface, and a light dispersing surface; and  
a light emitting diode array illuminant, disposed beside the light incident surface of the light guide panel, comprising:  
a carrier, wherein the carrier comprises a front surface and a back surface, and a plurality set of contacts are disposed on the front surface and the back surface of the carrier; and  
a plurality of light emitting diodes, disposed on the carrier, wherein the light emitting diodes are electrically connected to the sets of contacts, respectively, and the illuminant provided by the light emitting diodes emits a

light from a side of the carrier.

- [c11] 11. The backlight module of claim 10, wherein the carrier comprises a Printed Circuit Board (PCB).
- [c12] 12. The backlight module of claim 10, wherein the carrier comprises a flexible printed circuit (FPC) plate.
- [c13] 13. The backlight module of claim 12, further comprising a carrier, wherein the FPC plate is either a single layer FPC plate or a multi-layer FPC plate.
- [c14] 14. The backlight module of claim 10, wherein each of the light emitting diodes is a surface adhesion type light emitting diode element, and each of the light emitting diodes comprises a set of electrodes, and the light emitting diodes are electrically connected to the sets of contacts via the set of electrodes, respectively.
- [c15] 15. The backlight module of claim 10, wherein the light emitting diodes are symmetrically disposed with each other or interleaved disposed.
- [c16] 16. The backlight module of claim 10, further comprising a reflective panel, wherein the reflective panel is disposed on the light dispersing surface.
- [c17] 17. A backlight module, comprising:  
a light guide panel, comprising a light incident surface, a

light emitting surface, and a light dispersing surface; and a light emitting diode array illuminant, disposed beside the light incident surface of the light guide panel, comprising:

a folded FPC plate, comprising a first join area, a second join area, and a bending area, which is connected to the first join area and the second join area, wherein the first join area comprises a plurality set of first contacts, and the second join area comprises a plurality set of second contacts; and

a plurality of light emitting diodes, disposed on the first join area and the second join area, wherein the light emitting diodes are electrically connected to the sets of first contacts and the sets of second contacts, and the illuminant provided by the light emitting diodes emits a light from a side of the folded FPC plate.

[c18] 18. The backlight module of claim 17, wherein each of the light emitting diodes is a surface adhesion type light emitting diode element, and each of the light emitting diodes comprises a set of electrodes, and the light emitting diodes are electrically connected to the sets of first contacts and the sets of second contacts via the set of electrodes, respectively.

[c19] 19. The backlight module of claim 17, wherein the light emitting diodes electrically connected to the sets of first

contacts and the light emitting diodes electrically connected to the sets of second contacts are symmetrically disposed with each other or interleaved disposed.

[c20] 20. The backlight module of claim 17, further comprising a reflective panel, wherein the reflective panel is disposed on the light dispersing surface.